

[MICROWAVE-ASSISTED PEPTIDE SYNTHESIS]

Abstract

An instrument and process for accelerating the solid phase synthesis of peptides is disclosed. The method includes the steps of deprotecting a protected first amino acid linked to a solid phase resin by admixing the protected linked acid with a deprotecting solution in a microwave transparent vessel while irradiating the admixed acid and solution with microwaves, then activating a second amino acid by adding the second acid and an activating solution to the same vessel while irradiating the vessel with microwaves, then coupling the second amino acid to the first acid while irradiating the composition in the same vessel with microwaves, and cleaving the linked peptide from the solid phase resin by admixing the linked peptide with a cleaving composition in the same vessel while irradiating the composition with microwaves.